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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VU, THONG H

ART UNIT PAPER NUMBER

2142

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/960,623

Applicant(s)

BALDONADO ET AL.

Examiner

Thong H. Vu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-23 are pending.
2. This application claimed benefit of 60/241,450 filed 10/17/2000.

***Response to Arguments***

3. Applicant's arguments filed 12/19/05 have been fully considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as anticipated by Wang et al [Wang, 6,826,613 B1].

4. As per claim 1, Wang discloses A communications back-channel (i.e.: back end), for coordinating routing decisions, the communications back channel comprising:
  - a plurality of networking devices [Wang, clusters, col 6 lines 39-56, Fig 2A];
  - a plurality of routing intelligence units (i.e.: intelligent disk systems), wherein each of the plurality of the plurality of routing intelligence units includes software for controlling a distinct subset of the plurality of networking devices [Wang, intelligent disk

systems, intelligent selection among devices, col 19 line 35-col 20 line 25], each of the plurality of routing intelligence units further including:

one processes for controlling the distinct subset of networking devices [Wang, subsystem, col 17 lines 1-30]; and

one coordination processes for exchanging routing performance information with the plurality of routing intelligence units [Wang, router exchange policy with back-end system, col 21 lines 48-67].

5. As per claim 2, Wang discloses the one or more processes for controlling the distinct subset of networking devices are Border Gateway Protocol (BGP) sessions as inherent feature of Virtual router.

6. As per claim 3, Wang discloses each of the routing intelligence units is a route-reflector client as inherent feature of Virtual router.

7. As per claim 4, Wang discloses each of the distinct subset of networking devices is a route reflector to the route reflector client as inherent feature of Virtual router.

8. As per claim 5, Wang discloses the one or more coordination process in each of the routing intelligence units includes BGP sessions as inherent feature of Virtual router.

9. As per claim 6, Wang discloses the BGP sessions in the one or more coordination processes of each of the routing intelligence units includes: at least one BGP process; and at least one BGP stack, such that the at least one BGP stack exchanges routing parameters between the routing intelligence unit and the at least one BGP process, and the at least one BGP process exchanges routing parameters with the plurality of routing intelligence units [Wang, Virtual router and exchange policy, col 21 lines 48-67].

10. As per claim 7, Wang discloses the at least one BGP stack is a route reflector client, and the at least one BGP process is a route reflector as inherent feature of Virtual router.

11. As per claim 8, Wang discloses the routing performance information includes local path performance characteristics as inherent feature of Virtual router NAT.

12. As per claim 9, Wang discloses the routing performance information includes performance scores for routes as inherent feature of Virtual router NAT.

13. As per claim 10, Wang discloses the performance scores are exchanged via a Local Preference field as inherent feature of Virtual router NAT.

14. As per claim 11, Wang discloses a plurality of communication links directly coupling the plurality of routing intelligence units [Wang, directly, col 2 lines 7-20], wherein the plurality of communication links are dedicated exclusively for exchanging routing parameters between the plurality of routing intelligence units [Wang, col 21 lines 48-67].

15. As per claim 12, Wang discloses the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Wang, Fig 2A].

16. As per claim 13, Wang discloses the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units as inherent feature of Virtual router NAT.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-23 are rejected under 35 U.S.C. 103(a) as obvious over Wang et al [Wang 6,826,613 B1] in view of Ahuja et al [Ahuja, 6,981,055 B1].

17. As per claim 14, Wang discloses A method of exchanging routing parameters amongst a plurality of decision makers (i.e.: routers), each decision maker controlling a distinct subset of a plurality of routers [Wang, routers, col 21 lines 48-67], wherein the plurality of decision makers are in communication via a dedicated mesh, the method comprising:

However Wang does not explicitly detail  
asserting a first plurality of preferred routes for a first plurality of prefixes to the subset of routers; concurrent with the asserting the first plurality of preferred routes, sending a plurality of local performance scores generated from performance measurements for the first plurality of routes to the plurality of decision makers via the dedicated mesh (i.e.: Internet).

In the same endeavor, Ahuja discloses the BGP router table [Ahuja, Fig 2, col 2 line 55-col 3 line 62]; concurrent with the asserting the first plurality of preferred routes [Ahuja, parallel, col 16 lines 37-54]; performance scores; measurement to prefixes [Ahuja, points decreases, measurement to prefixes, col 9 lines 1-63]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the reflector mechanism, performance scores as taught by Ahuja into the Wang's apparatus in order to utilize the BGP process. Doing so would optimize network resource location and provide the updated routing information to direct traffic over Internet.

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18. As per claim 15, Wang-Ahuja disclose receiving a second plurality of routes for a second plurality of prefixes via the dedicated mesh [Ahuja, col 9 lines 1-63].

19. As per claims 16,18 Wang-Ahuja disclose receiving a plurality of performance scores for the second plurality of routes [Ahuja, performance scores col 9 lines 1-63].

20. As per claim 17, Wang discloses the plurality of performance scores are included in one or more Local Preferences fields in a BGP feed [Ahuja, performance scores col 9 lines 1-63].

21. As per claim 19, Wang-Ahuja disclose the asserting the first plurality of preferred routes is performed via a BGP feed to the subset of routers as inherent feature of BGP.

22. As per claim 20, Wang-Ahuja disclose the plurality of local performance scores are sent via a BGP feed to the dedicated mesh [Ahuja, performance scores col 9 lines 1-63].

23. As per claim 21, Wang-Ahuja disclose the plurality of communication links are at least partially comprised of physical links between the plurality of routing intelligence units [Wang, Fig 2A].



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24. As per claim 22, Wang-Ahuja disclose the plurality of communication links are at least partially comprised of logical links between the plurality of routing intelligence units [Wang, Virtual router and exchange policy, col 21 lines 48-67].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 6:00AM- 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
*Primary Examiner*  
*Art Unit 2142*

A handwritten signature in black ink, appearing to read 'Thong Vu', with a stylized flourish at the end.